



The place of community values within community-based conservation: The case of Driftsands Nature Reserve, Cape Town

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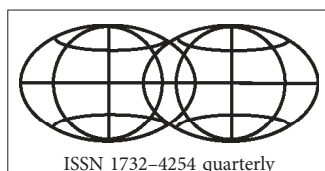
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The place of community values within community-based conservation: The case of Driftsands Nature Reserve, Cape Town

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Abstract. Contemporary approaches to biodiversity conservation within South Africa depart from community-based initiatives which seek to combine biodiversity conservation with socio-economic development. This paper employs a grounded theory approach to discuss the values of local communities and the management body (CapeNature), with regards to Driftsands Nature Reserve, Cape Town, by way of exploring the ways in which community-based conservation is being achieved within this case study. The findings conclude that the support and environmental education provided by CapeNature is going some way to addressing the needs of community-based conservation. Although the geographical location and demographics of the area produce a number of challenges for this approach, this research outlines the pathways for these challenges to be turned into benefits through even greater involvement with community-based conservation.

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1. Introduction

South Africa has an extensive and complex history with regards to biodiversity conservation, from its management by indigenous people, through colonisation, and now returning to people-centred approaches. During the colonial period conservation areas were established to protect natural resources; however, these early approaches included the forced removal of indigenous communities, and the development of conservation of as elitist activity in which access to conservation areas was given through social privilege (Department of Environmental Affairs, 2018; Rangarajan, 2003). Reed (2008) traces the trajectory of community-based conservation as an approach developed from the scepticism around the dominance of science within environmental decision-making. The desired outcome is the same, to increase the sustainability of decisions made with regards to biodiversity conservation by including the stakeholders within the process. In the South African context this can be interpreted as the move from the historical approaches to conservation in which it was a practice for elites, and therefore excluded indigenous communities both in their physical access to these designated areas, and within any decision-making. Currently, the People and Parks Programme (P&PP), borne from the Durban World Park's Congress and the Cape Vidal memorandum, works to promote and protect natural resources, and to highlight and implement the rights of local communities that have been (and are currently) adversely affected by conservation processes, and integrate all citizens into the decision-making process of conservation management (Department of Environmental Affairs, *sine anno*).

However, it has been acknowledged that there are many challenges presented when attempting to utilise the approach of community-based conservation, bottom-up, within organisational and governance structures of management organisations, top-down (Reed, 2008). For example, Tsuji (2015) suggest that although community-based conservation is increasing in South East Asia, the approach is not necessarily compatible with the overarching administration style. A critique of community-based natural resource management (CBNRM) at Lake Naiasha highlighted a lack of funding and

inadequate intellectual capacity within communities as to reasons why the approach of CBNRM was unsuccessful in this Kenyan context (Isyaku et al., 2011). In a comprehensive review of the literature surrounding the success of stakeholder participation in environmental management, Reed (2008) summarises that the quality of decisions made through this approach is highly dependent upon the process which develops them, and that more attention needs to be paid to these processes and tools, rather than focusing on the act of participating alone. Furthermore, Muchapondwa and Stage (2015) review the institutional and governance challenges that face conservation in southern and eastern Africa; however, rather than questioning the capacity of communities to engage in the decision-making process, the capability of governance structures to disseminate benefits to communities is discussed.

Critical analyses of approaches to conservation include critiques of both top-down, such as the colonial approach in South Africa, and bottom-up approaches, such as community-based conservation (Roux et al., 2016; Khadka, Vacik, 2012; Smith, 2008). Four fundamental critiques of participatory bottom-up approaches: tokenism; the myth of 'community'; lack of resources and; lack of critical knowledge about the process, are discussed by Smith (2008). In addressing such criticisms and reviews of community-based conservation, particularly within management authority structures, Roux et al. (2016) suggest that there is a need for the establishment of stages of feedback between operational structures and community-based conservation initiatives in order to achieve the most desirable outcomes for both biodiversity and socio-economic factors. A hybrid of top-down and bottom-up approaches is argued for by Khadka and Vacik (2012); however, they acknowledge the need for the development of a framework in which a hybrid approach can take place.

The significant contribution of this paper is through the exploration of a case study example within which the complexities of South Africa's turbulent history still have implications in relation to its biodiversity conservation and the development of socio-economic sustainability, which contributes to the critical reflection of community-based conservation approaches (Smith, 2008). The case study focuses on issues in relation to Driftsands Nature

Reserve, chosen because of the diversity of stakeholders living with the reserve boundary and adjacent to it. The geographical location of Driftsands is important in this instance as it lies within the Cape Flats, an area populated by previously disadvantaged and politically displaced people. There is a great variety of divergent and conflicting interests interacting within the Driftsands case study, with a multitude of political, cultural and socio-economic backgrounds. It is suggested that the historical context of both Driftsands' geographical location and its communities provide a good case study to explore the effectiveness of community-based conservation when performed by a management authority.

The aim of this practically-minded paper is to explore the differences between the values held by CapeNature staff members, the management authority, and interested community members in order to establish a heuristic of how to improve community-based conservation activities within the Driftsands Nature Reserve. The exploration of the values in such a way formulated the research question as: how can values held about Driftsands nature reserve be used to explore the development of community-based conservation within the organisational structure of the management authority?

The following objectives were set:

- to explore the values held by CapeNature employees and community members with regards to Driftsands;
- to develop a grounded theory for community-based conservation for this case study, based upon these values.

The disposition of this paper is as follows. Firstly, the context of South Africa's development from colonial influences upon the designation of conservation areas, through the devolvement to management authorities, towards a modern democracy and the redressing of historical socio-economic inequalities through community-based conservation practices. The methods employed to explore this case study utilised a grounded theory approach to elicit the depth and diversity of values in relation to Driftsands through qualitative interviews and focus groups with the communities of interest, analysis included the coding of values in line with the grounded theory approach. Subsequent sections explore the diversity of these codes, the relationships between them, and the discussion of the formulat-

ed grounded theory in relation to development of community-based conservation within the organisational structures of the management authorities. The paper ends with a conclusion, which conceptualises the developed grounded theory beyond this singular case study and includes recommendations for further research.

2. Dimensions of community-based conservation and the South African context

Hulme and Murphree (1999) conceptualise community-based conservation around three guiding principles: that the powers of conservation should be increasingly devolved and thus move from being state-centric to being placed within society itself; that the concept of conservation itself should be re-examined, taking into regard the notion of sustainable development and; the introduction of conservation into the neoliberal thinking surrounding economic markets. The first guiding principle states that there is a need for greater recognition and integration of traditional knowledge, including the different understandings, meanings and values placed upon nature and its conservation by different communities, including the concept of traditional ecological knowledge, and the development of fusion knowledge between the community and management authorities (Brown, 2003). This principle also recognises that the community in community-based conservation is often conceptualised as local society rather than a defined group of people with shared interest (Hulme, Murphree, 1999).

The concept of sustainability has been introduced within the second principle, to describe the shift in the conceptualisation of the notion of conservation itself. Irwin (2001) and Smith (2008) identify the Brundtland Commission and subsequent report in 1987 as the point at which community-based conservation became recognised as the approach through which sustainable development may be achieved both within and from biodiversity conservation, and such became the globally accepted approach to biodiversity conservation. Their third principle introduces neo-liberal econom-

ic thinking (dominant in the late twentieth century thinking) into the process of community-based conservation. This theoretical perspective relies on the dictum ‘use it or lose it’, suggesting that the only way habitats can be conserved is through exposing them to market forces in which scarcity of natural resources will be highly valued by consumers and so degrading practices will no longer be attractive to the market (Hulme, Murphree, 1999).

The South African context

A shift in approach has been undertaken in South Africa, by the now Department of Environmental Affairs, which describes its focus as people-centric in addressing biodiversity conservation and sustainable socio-economic development concurrently. Within its mission, as stated on its website, the Department states: “*We aim to radically transform our approach to environmental protection, while also balancing it with socio-economic development*” (Department of Environmental Affairs, 2018). This has led to the development of multiple people and park-type projects, and forms of community-based conservation initiatives, including community-based natural resource management (CapeNature, 2018), as well as the adoption of a co-management approach which aims to better develop the relationship between management organisations and communities, with specific regard to the access to and benefits from the nature reserve being co-managed (Department of Environmental Affairs and Tourism, 2006).

In addressing this lack of development, this paper seeks to explore the values held, in specific relation to access and benefits, by two communities of interest. Given the scope of the study, a community was interpreted to mean a group of people sharing a common interest based on territory, and who have some means of (inter)acting upon these commonalities (Flint et al., 2008). The two communities of interest are staff members working directly with Driftsands within the management authority of CapeNature, and members of the local population, residing within the reserve boundaries or in neighbouring wards, and who hold a level of interest with regards to Driftsands. The communities of interest were defined in this way as the methodology employed held CapeNature staff as both partic-

ipants within the study, and as gatekeepers to the other community of interest; this is a limitation discussed in the methodology section.

The evolution of community-based conservation paradigm has developed from communities’ involvement as participants in pre-defined initiatives towards the inclusion of the values of the communities concerned within decision-making process around such initiatives, as well as broadened to include the issues and aims of sustainability through poverty alleviation (Lynam et al., 2007). The overarching definition of community-based conservation applied within this research is an approach to conservation based on the idea that people who participate in decision-making will be more engaged in the implementation of agreed outcomes, and that people can decide upon management decisions themselves (Park, 2007). However, it is also acknowledged that sufficient support and information needs to be provided to inform these decisions.

3. Methodology – A grounded exploration of values

As aforementioned, this paper seeks to explore the values held with regards to Driftsands, by community members and staff, as a way of developing a grounded theory related to the integration of community-based conservation within the organisational structures of a management authority. The research methodology is qualitative in nature in order meet the research aims of eliciting multiple knowledges, subjective understandings and meanings, and examine the reasons local knowledge (values) and corporate policies (values) are in opposition through the extraction of real goals and ambitions (Marshall, Rossman, 2011).

Grounded theory was employed as the theoretical background and methodology as it enables the researcher to capture and focus on participants’ values and develop a theory from the examination of these narratives (Glaser, Strauss, 1967). In order to ensure the groundedness of the research and resulting theory, reflectivity was conducted by the researcher, in the form of a field journal, as well as the triangulation of the interviews and focus groups

within participant observation, as well as the verification of findings with both communities of interest (Rasmussen et al., 2016).

Semi-structured group and individual interviews were used as a method of data collection, which encouraged participants to discuss the values that they held with regards to the study area (Cast et al., 2008; Raymond et al., 2009). A sampling process characteristic of grounded theory was followed, which sought theoretical saturation of knowledge rather than following conventional (or quantitative) statistical practices; the sampling methods used are both theoretical and snowball sampling (Sarantakos, 2005). As a method, theoretical sampling actively sought participation from the populations of interest of CapeNature staff who have active involvement or interest in the management of Driftsands, and from interested members from surrounding communities. In total four members of the Green Park community; four members of the Sikhumbule community; four Protected Area Advisory Committee members and; one traditional healer took part in both individual interviews and focus groups within their own community settings. Six CapeNature staff also participated in the research, all of which had been involved with Driftsands in some capacity and were employed within both the community conservation and scientific services divisions of CapeNature. Participants are identified in the research by the area focus group they participated in or their employment by CapeNature, and an identification number. In line with grounded theory the interviews and focus groups were transcribed verbatim and the data coded multiple times, firstly by means of highlighting values within the transcripts, and then within Atlas.ti software, to develop codes and categories within the data, axial coding, until the point of saturation was reached, where no new codes of categories were generated. These categories were then explored in the ways they link together in order to develop a grounded theory.

The Driftsands Nature Reserve case study

As an institution that holds the statutory responsibility for biodiversity conservation in the Western Cape, CapeNature's ambition is to apply this approach in the Western Cape Province. To do this

CapeNature aims to achieve its mission to, “[m]anage, conserve and promote our human natural and heritage assets through best practice, access, benefit sharing and sustainable use.” (CapeNature, 2018). The model of community-based natural resource management (CBNRM) is utilised by CapeNature in their people and conservation programmes, to increase access to, benefits from and decision-making of local communities in the management of natural resources (CapeNature, 2018). The approach is based on engagement with local communities as a means of developing awareness around natural resources issues (or opportunities) which can involve actions at the community level or the management of shared resources (Isyaku et al., 2011).

The CapeNature-managed nature reserve, Driftsands, is an area of 900 ha that constitutes one of the only provisional nature reserves within the country that is located in an urban environment, only 20 km outside of the city of Cape Town, Western Cape (City of Cape Town, 2010; Open Africa, 2011). Driftsands is located within the Cape Flats, to the west and south sides the reserve is bounded by national roads. A medical research complex neighbouring the reserve to the north provides the only physical boundary. Driftsands was chosen as an area for the study given its unique geographical context, namely the fact that three communities permanently reside within the reserve boundary and that it is surrounded by highly populated areas of socio-economic deprivation on all sides. The five wards, containing both formal and informal settlements, which are direct neighbours of the reserve to the north of the N2 highway have a combined population of 210,804, which shows an increase of 60% since the previous census of 2001. Of this combined population, 78% live in formal housing, with an average ward unemployment (in the labour force of 16–65-year olds) of 34%. Of the employed population, 61% earn ZAR 3200 (USD 270) per month or less (City of Cape Town, 2011).

Driftsands lies within the Cape Floral Kingdom, one of the six globally recognised floral regions, which is of international biodiversity importance as a UNESCO World Heritage Site, inscribed in 2004 (CapeNature, 2018). The reserve contains examples of the lowland fynbos ecosystem and dune thicket strandveld (*Eulea racemosai* shrubland), only 11% of the original lowland habitat remains, and of this

only 3% is formally protected (Open Africa, 2011). Driftsands was chosen as the case study area as it is the only reserve managed by CapeNature that has settled communities living within its boundaries, thus providing the opportunity for community and CapeNature staff values to be present.

Limitations to the methodology

It is acknowledged that there are several limitations which contributed to the poor outcome in participation numbers—these were mainly related to the use of CapeNature as a point of access to the associated communities of interest. This included the arrangement of focus groups and interviews, and the translation within this research. Participants were identified and recruited on the basis of their existing involvement with CapeNature and Driftsands: it is acknowledged that this does not provide a representative sample of the populations residing within the wider geographical location. There was also a

concern regarding the researcher's own social identity, particularly their lack of language proficiency and being a non-South African that could potentially bias the data collection process.

4. Results – The same but different: Exploring expressed values

Through the processes of grounded theory coding and data analysis, three major themes (or categories) emerged from within the data; these were termed foundation, supportive and surface values. These coded themes reflect the values held by the Driftsands community and CapeNature members who took part in the research and, unanticipated within the research, the commonalities rather than differences within the values of the populations of interest have been discussed.

It could be suggested that these categories reflect an ecosystem services approach which can be



Fig. 1. Driftsands Nature Reserve and surrounding area.
Source: Geoview (2017)

categorised as provisioning, regulating, habitat, and cultural services (Biodiversity Information System for Europe, *sine anno*). These categories emerged through a grounded theory approach and the researcher's submersion in the data, and as such, it could be argued, reflect both an approach employed by CapeNature staff members, and the inclusion of this in community-based conservation initiatives that have been an influence upon community members.

Foundational values

Foundational values have been categorised as those which provide the grounding to the other two coded categories, supportive and surface values. Foundational values were categorised as those values which form the basis for the reserves existence, both in its environmental and social context, they can also be described as intrinsic values held about nature. The category of foundational values was divided into two subcategories reflecting both the biodiversity and social significance of the nature reserve: Foundation – environmental and Foundation – social. These two categories are considered to be of equal importance given the designation of the reserve as both an area for biodiversity conservation, and for community access.

CapeNature staff members widely acknowledged that whilst some environmental value remained within the reserve, its environmental quality was poor. One CapeNature staff member expressed their foundation environmental value as:

We've got the wetlands here you know, and in terms of value that they have, the filtering of the water and so many things in terms of the ecological importance of the reserve. It is also part of the BioNet, because you know most about the pieces of Rhinosterfeld and this and that that is left... (CapeNature staff member 1)

Community members also held some similar values with regards to the foundational environmental sector, although these held some overlap with their foundational values with regards to societal benefits:

If you look around the other areas you will see that we are living in a different kind of area, in other places there are no open spaces next to their communities, and there are still medicinal plants that are inside those areas that we can utilise as well as other things, so here is totally different from other areas. (Green Park community member 1)

The foundational society-based values were almost exclusively expressed by CapeNature staff members, all of whom expressed a value and opportunity in the uniqueness of Driftsands having communities live within the reserve and being bounded by such a highly-populated area:

Well I think the, the most obvious and the biggest one [value] is the location, I think the fact that it is so close to communities, you know, it adds so much value to it. (CapeNature staff member 1)

Supportive values

Supportive values, it could be suggested, were the most significant category of values expressed, although they were almost exclusively expressed by CapeNature staff members. This set of values refers to the opportunities that the management body provides to the communities, by way of conservation of the reserves biodiversity, and the ability for the community to participate in conservation activities which would be seen to increase their socio-economic status. It was widely commented upon that because of its low environmental status and unique community situation, there should be less concern for the traditional nature/society divide and a more integrated approach could, and should, be adopted:

(...) I'm maybe going to make a random statement now but maybe the community is not aware of it, but if Driftsands for example is utilised as a, let's say, a place where harvesting can be done and you know people can go and enjoy and so on, I don't think the neighbours really realise that they won't do that much harm to Driftsands from a biodiversity and an impact point of view. (CapeNature staff member 2)

One staff member goes even further and suggests that Driftsands is being used as a case-study area for CapeNature to inform wider community-based conservation and engagement on other reserves; however, this was interpreted as more of an ambition than a practice:

Driftsands is one of the only places that I know of where we have people physically living on our reserve, but the, the practice does inform executive decision and strategic management in how do we actually engage communities in new ways, how do we deal with this issue of secondary industries, benefits, utilization of resources... (CapeNature staff member 3)

Surface values

The final category in the value multiplicity were those termed as surface values, which are dependent upon both the foundational and supportive values in turn. As this was the most widely referenced category, it was spilt into sub-categories of cultural; economic; educational; and challenge values. Although only one category was defined as having an economic benefit in its value, it was clear that the vast majority of the different values expressed throughout all of the sub-categories required some economic input, resulted in an economically expressed output, or both.

Cultural – refers to those values expressed in relation to the opportunity that Driftsands offers in the coming together of local communities, as well as Driftsands being a site for cultural education provided by the communities for the communities, which is of particular value given the urban context of the reserve:

I would say the reserve, like Driftsands reserve, assembles the communities, the coloureds, the whites and the blacks... I am a traditional healer, to collect some herbs, Rastafarians, all that nature, living with that nature. (Community member, traditional healer)

Educational – within this context educational values refer to environmental education provided by CapeNature. CapeNature staff members tended

to discuss community-based environmental education as a way of achieving community engagement and wider social benefits, for example, the diversity of careers available in nature conservation, and health and wellbeing:

[T]here needs to be education first, and then fencing after, because if they know nothing they are going to, they are just going to make a plan to get in, if they are not educated about the reserve. So, the education first and then fence after that; education is the key of everything. (Community member, traditional healer)

Whilst it is seen that community members also acknowledged the need for environmental education there appeared to be a slightly different approach to ensuring the protection of the reserve from the CapeNature staff members, with a community member suggesting that education is needed to justify why there should be a physical boundary to the reserve.

Economic – this category was defined by the responses as the opportunity for the reserve to provide an economic benefit to the community, which aligns with CapeNature's approach to build a conservation economy. Economic benefits included CapeNature-funded initiatives such as employment programmes and skills development. However, the size of the reserve is seen to limit the possibilities, as well as the skills being transferable in the local context and job markets. Community members also commented on the willingness of the community members to get involved:

(...) Driftsands provides an opportunity for some form of poverty alleviation through conservation activities that we perform...there is alien clearing to be done, soil erosion management but that's going to stop, you're not going to do that forever... So really it's not going to provide a sustainable conservation economy. (CapeNature staff member 4)

Challenge – this is the most diverse category of values reflecting the diversity of circumstance and opinion within the communities and CapeNature staff; this included a variety of negative values which participants did not want to hold with regards to

the reserve, and also those which posed a challenge to CapeNature's objectives. There was a great deal of conflict within these values as there were differing levels of environmental awareness within the community of interest, and a variety of reasons for the interactions between community members and CapeNature. For example, one community member acknowledged the negative environmental impact of cattle grazing, whilst in another interview a community member viewed the opportunity to graze cattle as an economic and cultural benefit.

And you know on this side of the reserve there's cattle farmers there, there's a whole lot of them there and all those cattle there they graze here in the reserve and now they are destroying the plant life. (PAAC community member 1)

There was expression from numerous community members about the need for socio-economic development of the area, and the desire for the area to be serviced; however, there was also a great awareness of the environmental impact this may have:

It was promised to us that the houses that will be built for us in this area will be environmentally friendly, it won't be the same as in the other areas as the other areas are not in a nature reserve... We want to take care of the area until we have those houses that are environmentally friendly, and we will still like to live in this area and take care of it. (Green Park community member 2)

However, the topic of housing and service provision divided opinion within the community, even within the groups living within the reserve boundary, with another community member stating:

No, the reserve is holding back community development. Because it's not the city's land it is CapeNature's and they want to keep it natural, but if we can change it we would. (Sikhumbule community member 1)

5. Discussion – Painting the red tape green: A grounded theory

Brown (2003) suggests that a mere paradigm shift, from the exclusivity of protectionism to a community-based approach to conservation, will not be enough to create a significant change in the success of conservation programmes, and that to achieve a meaningful change community-based conservation must make a shift in decision-making and organisational structures. This critique is discussed in relation to values that have been expressed to see where such a shift could be made in the management of Driftsands, particularly in the development of more flexible green tape which would allow community-based conservation to take place within the organisational and governance structures.

The theory developed from this grounded theory approach to this research has been termed 'green tape', this theory refers to the flexibility and level of novelty required within organisational and institutional processes within management authorities, such as CapeNature, in order to support the integration of community values in community-based integration, particularly through the control and allocation of funding, as well as the support and development of appropriate knowledge through which communities can make informed decisions about their natural resource management and its conservation. The theory was demonstrated in one community member's acknowledgement that further education is needed in order to protect Driftsands, they suggest that education needs to come first before any further management plans are developed and implemented. As such, the input and support CapeNature provides through environmental education can help protect Driftsands as it develops an understanding around conservation and provides the informed context in which communities are able to make their own decisions with regards to access and benefits.

The new theory is significant, particularly as the vast majority of conservation areas are controlled and managed by governmental authorities, and as such would be constrained in their community-based approaches due to their organisational structures and high levels of red tape, especially in the allocation of funding. The critiques offered

throughout the discussion of community and CapeNature staff member values demonstrate that a level of community-based conservation is being practised at CapeNature within the confines of organisational red tape. Although it is meeting the goals, aims and objectives of both CapeNature and the broader concept of community-based conservation as defined, it is suggested that this is the adoption of a green tape theory. The green tape theory is not just applicable to the grass-roots level, where participation is sought from communities in initiatives that have been designed for them or where communities are asked for their input on a decision that has already been taken. The challenges to this approach were demonstrated in both the community and staff member's questioning of the long-term sustainability of socio-economic and skills-building initiatives in relation to the needs of both the reserve—with regards to vegetation clearing, for example—and the skills requirements of the communities when gaining employment in other sectors. Berkes (2007) suggests that community-based conservation needs to be undertaken at all levels of the organisation and within all decision-making processes with regards to biodiversity conservation.

Reed's (2008) conclusion further highlights the need for continued support within the process, to be provided by the management authority. From this perspective the green tape theory developed, suggesting that processes of community-based conservation and stakeholder participation must not overlook the need for highly-skilled facilitation, arguing that stakeholder participation will need to be institutionalised in order to create an organisational culture which can facilitate the process of community-based conservation more successfully.

6. Conclusion

The research sought to look at the differences between the values held by the CapeNature community and the Driftsands community, as a way of assessing the ways in which the community values could be better integrated into conservation practices and result in more successful community-based conservation activities. As such, the conservation practices operational within CapeNature's manage-

ment of Driftsands are that of bottom-up procedures and processes within a top-down operational model. The green tape theory represents the challenges that CapeNature and the communities face in developing a community-based conservation approach which is organisational in its context, given the support that CapeNature still needs to provide in order for communities to make the most appropriate conservation decisions based on their values and knowledge.

The Driftsands context of the green tape theory is also concerned with the allocation, provision and monetary value of economic resources placed into conservation activities which the community can then utilise to develop their own socio-economic status and develop a conservation economy in partnership with CapeNature. It is the dualistic function, for both the community and the environment, of community-based conservation that Brockington et al. (2008) describe as resulting in a conflict in the control of funding. They continue to discuss how these funding structures are further complicated by law and policy regarding environmental conservation, human and social rights, and the involvement of governmental partnerships with NGOs, private economies, industry and community-based arenas.

It is recommended that further research be conducted in order to develop the vague and ambiguous concept of 'community', particularly within such a diverse population, and its use in the term 'community-based conservation'. Given the suggestion that stakeholder participation needs to be further integrated into all levels of process and decision-making within the organisational and governance structures, there is a need for more research to be undertaken within management authorities to establish where these integrations could take place. It is argued that any development of a middle-ground approach to community-based conservation within management authorities, such as a green tape theory, will further strengthen and legitimise conservation efforts which seek to both conserve biodiversity and produce socio-economic benefits for their communities (1).

Note

(1) This article is part of the 40th issue of *Bulletin of Geography. Socio-economic Series* entitled “Sustainability—differently”, edited by Mirek Dymitrow and Keith Halfacree (Dymitrow, Halfacree, 2018).

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